

WHAT IS CLAIMED IS:

1. A medical dressing assembly, comprising:

- means for isolating an affected area of a patient from an external environment, wherein placement of said isolation means defines a volume surrounding at least a portion of said affected area of said patient;

- means for controllably inputting matter into said volume; and

- means for controllably exhausting matter from said volume.

2. The medical dressing assembly according to claim 1, wherein said isolation means is geometrically configurable into at least one of the group consisting of a hand dressing, a forearm dressing, an upper arm dressing, a facial dressing, an upper torso dressing, a lower torso dressing, an upper leg dressing, a lower leg dressing, a foot and ankle dressing, and mixtures thereof.

3. The medical dressing assembly according to claim 1, wherein said isolation means comprises:

- at least one patient engaging member; and

- a cover member associated with said at least one patient engaging member.

4. The medical dressing assembly according to claim 3, wherein said at least one patient engaging member comprises a patient engaging base member having an inner peripheral geometry greater than said affected area of said patient.

5 5. The medical dressing assembly according to claim 4, wherein said patient engaging base member is at least partially associated with an adhesive.

6. The medical dressing assembly according to claim 5, wherein said adhesive is covered with a protective, peel-away member.

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7. The medical dressing assembly according to claim 3, wherein said at least one patient engaging member comprises a patient engaging strap member.

8. The medical dressing assembly according to claim 7, wherein said patient engaging strap member is adjustable.

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9. The medical dressing assembly according to claim 7, wherein said patient engaging strap member is at least partially associated with an adhesive.

20 10. The medical dressing assembly according to claim 9, wherein said adhesive is covered with a protective, peel-away member.

11. The medical dressing assembly according to claim 3, wherein said cover member is expandable and defines a variable volume.

12. The medical dressing assembly according to claim 11, wherein said cover member is substantially transparent, thereby enabling observation of said affected area of said patient.

13. The medical dressing assembly according to claim 3, wherein said cover member is non-expandable and defines a fixed volume.

14. The medical dressing assembly according to claim 13, wherein said cover member is substantially transparent, thereby enabling observation of said affected area of said patient.

15. The medical dressing assembly according to claim 1, wherein said matter inputting means comprises at least one conduit hermetically associated with said isolation means.

16. The medical dressing assembly according to claim 1, wherein said matter inputting means comprises two conduits hermetically associated with said isolation means.

17. The medical dressing assembly according to claim 1, wherein said matter inputting means is associated with at least one of a regulator, a clamp, and a filter for controlling the input rate of matter into said volume.

5 18. The medical dressing assembly according to claim 1, wherein said matter exhausting means comprises at least one aperture associated with said isolation means.

19. The medical dressing assembly according to claim 1, wherein said matter exhausting means comprises at least one conduit hermetically associated with said  
10 isolation means.

20. The medical dressing assembly according to claim 1, wherein said matter exhausting means is associated with at least one of a regulator, a clamp, and a filter for controlling the exhaust rate of matter out of said volume.

15 21. The medical dressing assembly according to claim 1, further comprising a source for supplying a controlled gas.

22. The medical dressing assembly according to claim 21, wherein said controlled gas  
20 is selected from the group consisting of air, purified air, a noble or inert gas, an oxygen enriched gaseous mixture, oxygen, and mixtures thereof.

23. The medical dressing assembly according to claim 1, further comprising cooling means associated with said matter inputting means.

24. The medical dressing assembly according to claim 1, further comprising at least one of a vaporizer or nebulizer associated with said matter inputting means.

25. The medical dressing assembly according to claim 1, further comprising filtering means associated with said matter exhausting means.

26. The medical dressing assembly according to claim 1, further comprising means for collecting discharge matter from said affected area.

27. The medical dressing assembly according to claim 1, wherein said volume is pressurizable from approximately ambient pressure to approximately 10 pounds per square inch.

28. A medical dressing assembly, comprising:

- an isolating member, capable of isolating an affected area of a patient from an external environment, including:

- at least one patient engaging member;

- a cover member associated with said at least one patient engaging

member, wherein placement of said isolating member defines a volume surrounding at least a portion of said affected area of said patient;

- at least one input conduit hermetically associated with said isolation member;

and

- at least one exhaust conduit hermetically associated with said isolation member.

29. A method of dressing an affected area of a patient, comprising the steps of:

- providing a medical dressing assembly including; an isolating member having at least one patient engaging member and a cover member associated therewith; at least one input conduit; and an exhaust;

- operatively securing said isolating member associated with said cover member onto said patient so that at least a portion of said affected area of said patient is isolated from an external environment;

- supplying matter into said medical dressing assembly through said at least one input conduit; and

- venting matter from said exhaust into an external environment.

30. The method according to claim 29, further comprising the step of cooling said matter prior to the step of supplying matter into said medical dressing assembly.

31. The method according to claim 29, further comprising the step of introducing vaporized or nebulized medication into said medical dressing assembly through said at least one input conduit, and, in turn, applying said medication to said localized area of said patient.

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32. The method according to claim 29, wherein the step of venting matter from said exhaust into an external environment includes the step of filtering said matter prior to venting said exhaust into said external environment.

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33. The method according to claim 29, wherein the step of operatively securing said isolating member onto said patient includes the step of substantially precluding airborne matter from the external environment from contacting said affected area of said patient.

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34. The method according to claim 29, wherein the step of supplying matter into said medical dressing assembly through said at least one input conduit includes the step of pressurizing a volume surrounding said affected area of said patient.

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